PEDESTRIAN AND TRAFFIC SAFETY ADVISORY COMMITTEE
SPEED HUMPS SUBCOMMITTEE - DISCUSSION POINTS

- Speed Humps - engineering method (geometric pavement design) to slow traffic on residential streets. Speed humps are a relatively inexpensive traffic calming method and are effective in reducing vehicle speeds. For example, for a desired speed of25 mph or below, speed humps that are 14 feet wide and approximately 3" high may be used. For a desired speed of 30 mph, a 22-foot speed hump of similar height may be used. Generally, most effective when used in a system with speed humps spaced 300 - 600 feet apart. Multiple speed humps spaced over short distances are commonplace in Montgomery County. 1

- Speed humps are designed for residential roadways of two lanes or less at a posted speed limit of 30 mph or less (with ss" percentile speeds of 31-34 mph). Industry analysts consider roadways with volumes of 600 - 5,000 vehicles per day as good candidates for speed humps.

- Most vociferous opponents of use of certain traffic calming devices such as speed humps are the emergency situation responders. The Montgomery County Fire and Rescue Commission conducted a study of the effect on emergency vehicle response times of the use of speed humps (also studied traffic circles). The result of the study was that speed humps cause delays for rescue vehicles en route to incidents. Although there are a number of variables (e.g., vehicle size, scope of speed hump, etc.) that go into the calculation of each response, the general conclusion was that speed humps cause delays of between 2.8 and 7.3 seconds. The higher delay is the equivalent of adding .05 mile per speed hump between the station and the incident location on an unimpeded road, reducing the geographic area that can be serviced within 5 minutes (presented in the Commission study as a response time goal but not adopted in Montgomery County). The Commission's conclusion is that speed humps "cause considerable delays for responding fire-rescue apparatus, which may adversely impact the outcome of certain life-threatening incidents, such as those involving cardiac arrest, uncontrolled bleeding or persons trapped
in burning buildings or vehicles."

1 SPEED LUMPS - traffic calming method that may be an alternative [are there others, *e.g.*, rumble strips] to speed humps; consist of two or more raised and rounded areas placed laterally across a roadway with precisely spaced gaps; approximate in cost to speed humps and slows vehicles similarly but can be designed to minimize delay for emergency vehicles and discomfort for cyclists. Although data are limited because of the relatively recent arrival of speed lumps on the roadways, preliminary analysis suggests traffic calming effectiveness equal to speed humps, limited (to date) traffic diversion, minimal, if any, impact on emergency response times and favorable public acceptance.

- ISSUES - compiled from comments of Montgomery County Fire and Rescue Commission, members ofthe Montgomery County chapter ofthe Maryland Municipal League and general research. REMINDER: The incorporated jurisdictions may set their own policies with regard to traffic calming, including the use of speed humps.

  <u>Arguments FOR</u>

  Reduce serious injuries or death [53%] (much more effective than stop signs)
  Reduce accidents [42%]
  Reduce and slow traffic
  Discourage cut-through use of residential streets
  Self-enforcing ("sleeping police officers")
  Enhances goal of pedestrian safety particularly in areas near schools and day care and recreation facilities
  Benefit to bicyclists as it slows vehicle traffic on shared-use roadways
  Relatively inexpensive making a speed bump program one of the best buys for pedestrian safety
  Strongly supported by residents on whose roads they are installed

  <u>Arguments AGAINST</u>

  Increased emergency response times
  Increased noise level at each hump (although the noise change throughout the hump series may be insignificant)
  Increased air pollution
  Hindrance to street maintenance providers and snow removal
  Discomfort to bicyclists (including toes of the bicyclists striking the hump if too high)
  Diversion of traffic to other parallel and adjacent residential streets
  Liability (if improperly installed)
  Aesthetics (i.e., ugly)